

**SYSTEM AND METHOD FOR EFFECTIVELY IMPLEMENTING
A DITHER MATRIX FOR AN ELECTRONIC PRINTER DEVICE**

5

ABSTRACT OF THE DISCLOSURE

A system and method for effectively implementing a dither matrix for an electronic printer device may preferably create an improved dither matrix with optimal threshold values for use in a corresponding dither tile. During a matrix populating procedure for assigning tile threshold values for the dither matrix, the dither tile may preferably be embedded within a larger frame area of additional adjacent frame cells. A design entity may then preferably compute various cost functions when the additional boundary cells of the frame area are in place. The embedded dither matrix of the dither tile is thus preferably populated within the foregoing frame area so that various boundary effects may be taken into account when an overall cost function of both the dither tile plus the frame area is calculated.